

KhaiEL
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**EARTH
FOODS**



农业的目地在于食物 唯有健康食物 方能承载人类之延续。
Food is the ultimate goal of agriculture. Healthy food is the only key to sustain life.



人类自从进入现代农业以来，就进入了一个恶性循环的怪圈：

不断的大量使用化肥；土地不断酸化与退化。

不断的大量的开发新的农药；超级病害却不断的产生。

结果我们的农地越来越毒，充满了化学物残余，无法耕种，地表到处都是废弃农地。植物越来越脆弱，难以耕种。

其实真正的原因是：植物就是在一开始就营养不良的情况下大量生产的。



Mankind has entered a vicious circle ever since we have developed into a modern agriculture.

The cultivation land has degraded and turned acidic gradually due to the overuse of chemical fertilizers.

The invention of new pesticides has generated more and more super diseases.

As a result, our cultivation land is covered by chemical residues and become even more toxic and finally being abandoned as a non-agricultural land.

The main reason is: Plants are being cultivated under malnutrition conditions from the beginning.



根据 Liebig最小因子定律：植物的生长量取决于在最小量的元素”，如同水桶最高水位取决于破洞漏出的位置。

植物需要至少16种元素，可惜近代农业种植只偏重3到5种元素而已，我们的植物可以说长期营养不良了百年之久。



According to Liebig's Law of the Minimum : "The plant yield is proportional to the amount of the most limiting nutrient, whichever nutrient it may be." Likewise the maximum water level of the bucket depends on the location where the hole of water leaks.

Plants need at least 16 kinds of elements. Unfortunately, the plants are suffered from malnutrition over the past few hundred years as the modern agriculture practice nowadays emphasizes only on 3 to 5 types of elements.

植物需要至少 16 种元素 16 Elements Necessary for Plants		
Major Nutrients from Air & Water 主要生命元素 (来自空气与水)	Carbon (C) Hydrogen (H) Oxygen (O) Nitrogen (N)	碳 氢 氧 氮
Major Nutrients from Soil & Fertilizer 主要生命元素 (来自土)	Phosphorus (P) Potassium (K)	磷 钾
Secondary Nutrients 次要元素	Calcium (Ca) Magnesium (Mg) Sulfur (S)	钙 镁 硫
Micronutrients 微量元素	Boron (B) Chlorine (Cl) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn)	硼 氯 铜 铁 锰 钼 锌

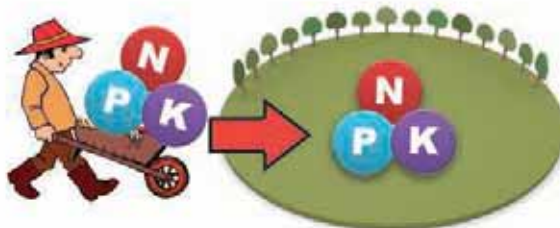
这绝对不是公平交易 This is definitely NOT a fair trade



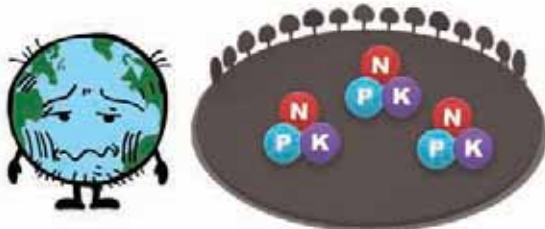
健康的土地原本就有超过16种元素。A healthy land suppose to have more than 16 types of elements.



人类大量的开拓农业，取走了多数的元素。Mankind has grabbed away most of the elements as a result of large scale agriculture development.



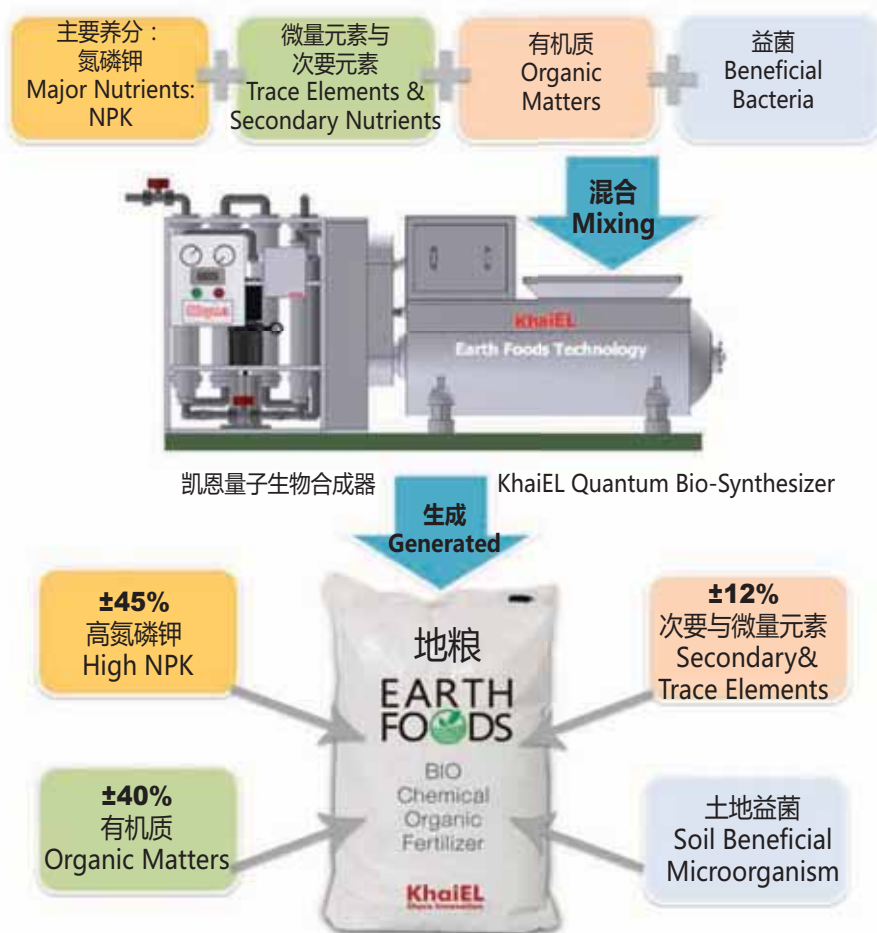
人类还需要吃食物，所以为土地提供了元素（肥料），但主要只是氮磷钾三种而已。Mankind has provided elements (fertilizers) to the land for the sake of obtaining more foods from it. But only 3 types of NPK elements added.



结果，植物长期营养不良，病害丛生，导致农药过度使用。如同人体若只是摄取碳水化合物而没有蛋白质，是不可能健康的。As a result, the plants are suffered from malnutrition and diseases attack leads to overuse of pesticides. Likewise mankind will never stay healthy when consuming only carbohydrate without any protein intake.

有鉴于此，凯恩科技开发了全新的农业科技，把四大类型完全不同属性的物质、互相对抗的物质，通过《量子生物合成器》结合成完全营养的土地肥料--就是《地粮》

In view of this, KhaiEL technology has innovated a brand new agricultural technology by combining the 4 major types of materials with different characteristics which against each other through "Quantum Bio-Synthesizer" in order to produce fertilizers with complete nutrients- "Earth Foods"(EF).



《地粮》几乎是100%完全食物，内容物全是植物可完全吸收的营养物质，没有任何的填充物、添加剂与粘土。这是前所未有的“完全营养”，所以我们称之为《地粮》，土地的真食物。

"Earth Foods" is a 100% whole food. It contains nutritious substances that can be fully absorbed by plants without any fillers, additives and clay. This is the only "whole nutrients" that can be found. Hence, we named it "Earth Foods", the real foods for the land.

成熟的产品链

我们针对不同的农业需求开发了不同的地粮产品。比如

：

绿粮：成长期用（15-15-15）

蓝粮：开花期用（12-12-17）

红粮：结果期用（13-9-24）

还有一些液态的有机生物水肥。

还有顾客要求的特别配方：

香蕉地粮、稻米地粮、油棕地粮、葡萄地粮、玉米地粮
... 等任何不同农作物的地粮。

不论是什么产品与配方，必然是以4大主体为主：氮磷钾+微量元素+40%有机质+土地益菌。

Versatile Product Chain

We have developed different EF varieties to meet the different farming requirements.

Green Food: Growing Stage (15-15-15)

Blue Food: Flowering Stage (12-12-17)

Red Food: Fruiting Stage (13-9-24)

There are some biological organic liquid fertilizers.

Besides, we do customize according to special requirements from customers.

EF-Banana, EF-Paddy, EF-Oil Palm, EF-Grape, EF-Corn etc...

Despite of any different products and formulas, the 4 main ingredients will be NPK + Trace Elements + 40% Organic Matters + Beneficial Bacteria.





使用地粮的农作物特征是：

- (1) 根系壮大，须根很多。
- (2) 抵御病害的能力强，不容易生病。
- (3) 生长期比较快。
- (4) 产量与重量增加。
- (5) 使用的时间越长，土地的生物多样性越丰富。
- (6) 不需休耕，永续耕种。
- (7) 矿物质复杂，所以食用口感丰富。

The special features of plants that are using Earth Foods:

- (1) Strong main roots system with plenty of fibrous roots.
- (2) Resistance towards diseases.
- (3) Shorter growth period.
- (4) Increase in product yield and weight.
- (5) The Bio-diversity will get richer with the longer application period.
- (6) Sustainable cultivation without fallow period.
- (7) Crops are good in texture due to the complexity of minerals.



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完全营养的重要性

《地粮》复杂而多样的营养素，被植物吸收以后，加上光合作用，可以产生复杂的生物化学代谢作用，产生更丰富的养分。以下是一组薑营养成分的化验表，使用《地粮》种植的薑比一般使用化肥的薑，养分高出 3-5 倍。



长期使用氮磷钾化肥的薑，虽然可以促成高产量，但是营养量与素质都差。如同吃垃圾食物的长大的胖子一样，体格虽然庞大，但是营养不良，体弱多病。

The importance of whole nutrients

The plants are able to create a complicated biochemical metabolic effects to produce richer nutrients after absorbing such complex varieties of nutrients from Earth Foods during photosynthesis process. Table below shows the analysis report of ginger nutritional facts. Ginger with Earth Foods possessed 3-5 times higher nutrition comparing to ginger with chemical fertilizers.

Even though the application of chemical fertilizers for long term can increase the ginger yield, the product nutrients and quality are bad. Likewise a fat guy who consumed a lot of junk foods, he tends to have a huge physical size yet his body is weak and sick due to malnutrition.

Nutrients 营养	Earth Foods 地粮	Chemical Compounds 化肥
Calories 热量	364 kcal	80 kcal
Protein 蛋白质	11 g	2 g
Fat 脂肪	5.9 g	1 g
Saturated Fat 饱和脂肪	2.3 g	0 g
Cholesterol 胆固醇	0.0 mg	0.0 mg
Carbohydrates 碳水化和物	66.7 g	18 g
Edible Fiber 食用纤维	15.3 g	2 g
Sodium 钠	87.9 mg	13 mg

突破工艺瓶颈

过去的肥料科技工艺，还没有办法将高含量的氮磷钾、微量元素、有机质（包括有机酸类）与益菌等四种物质结合在一起。《地粮》则已经完成了这个突破，通过量子生物合成器，完美的把四大物质融合在一起。

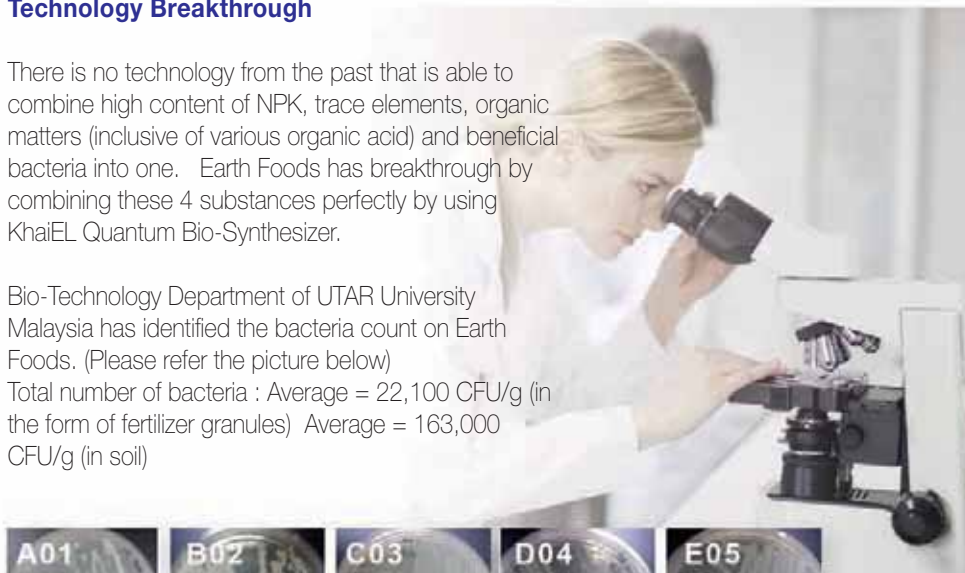
马来西亚拉曼大学（UTAR University）生物科技部门鉴定了《地粮》的菌类（请查看下面图表），在肥料袋里面的菌总数是：22,100 cfu/g（）；施放在泥土中的菌总数是 163,000 cfu/g

Technology Breakthrough

There is no technology from the past that is able to combine high content of NPK, trace elements, organic matters (inclusive of various organic acid) and beneficial bacteria into one. Earth Foods has breakthrough by combining these 4 substances perfectly by using KhaiEL Quantum Bio-Synthesizer.

Bio-Technology Department of UTAR University Malaysia has identified the bacteria count on Earth Foods. (Please refer the picture below)

Total number of bacteria : Average = 22,100 CFU/g (in the form of fertilizer granules) Average = 163,000 CFU/g (in soil)



Colony 菌落	Microorganism Genetic Identification 16S RDNA 菌类遗传鉴定	Gram Staining Results 革兰氏染色结果
A01	Bacillus Amyloliquefaciens (99%) 解淀粉芽孢杆菌	阳性，杆
B02	Bacillus thuringiensis (97%) Bacillus cereus (97%) 苏云金芽孢杆菌/蜡状芽孢杆菌	阳性，杆
C03	Bacillus Oleronius (97%) 仙人掌杆菌	变量，杆
D04	Bacillus subtilis (100%) 枯草芽孢杆菌	阳性，杆
E05	Bacillus Shackletonii (96%) 沙氏芽孢杆菌	变量，杆

No.	Product	T.N (%)	P2O5 (%)	K2O (%)	MgO (%)	CaO (%)	C.A (%)	pH	Mois (%)	SO ₂ (%)	B ₂ O ₃ (%)	Cu (ppm)	Fe (ppm)	Mn (ppm)	Zn (ppm)	Cl (ppm)	MO (ppm)	WS P ₂ O ₅	WS MgO	OM	C/N ratio
1	Blue	11.6	12.1	17.4	3.0	1.0	14.2	7.8	6.4	12.2	1.4	5.8	428	49	14.4	64.8	30.8	6.5	0.3	40.0	0.27
2	Fruit	18.5	10.0	13.0	0.5	0.02	11.2	6.9	4.7	10.7	0.03	4.2	228	2.5	22.4	67.9	26.1	8.7	0.1	62.1	0.08
3	Red	13.4	9.3	23.4	3.3	0.02	10.6	6.1	5.1	8.9	0.71	6.1	148	ND	23.3	71.1	16.5	5.1	1.0	43.0	0.41
4	Green	15.0	16.2	8.5	4.3	0.02	16.8	6.1	8.4	14.7	0.05	4.9	342	36	33.9	58.2	12.3	10.0	0.7	55.0	0.24

地粮产品 主要元素 柠檬酸 次要与微量元素 有机质
 Earth Major Citric Secondary & Organic
 Foods Elements Acid Trace Elements Matters

肥料百年的集大成者

以上就是部分地粮产品的成份、内容报告可以看出《地粮》是一种全新的综合肥料。化肥虽然产量高，但是破坏土地；有机肥虽然有利于生态环境，但产量不高；而地粮是全面解决了“化肥”与“有机肥”的两大难题。

还有其他的好处：抗病力强，所以不需要菌药；由于是100%可吸收养分，所以施肥量比化肥少一半。拥有大量有机质与益菌，短时间内可促进更多的环境微生物与蚯蚓，让农地恢复自然生态，生机勃勃，不需要休耕。

Master of Fertilizer

The report above shows the partial contents of Earth Foods ingredients. It can be found that Earth foods are indeed a brand new compound fertilizer. Chemical fertilizer is able to promote product yield yet it tends to destroy the environment. Organic fertilizer is environmental friendly yet produce little yield. Earth Foods has managed to solve both problems encountered by chemical fertilizer and organic fertilizer.

Other advantages: No fungicide required due to its high resistance towards diseases. Earth Foods dosing amount required is 50% of the chemical fertilizers as 100% of nutrients are being fully absorbed. Its high content of organic matters and beneficial bacteria are able to promote the recovery of a balanced ecosystem by microorganism and earthworms. No fallow period is required.



农业的真谛

农业的目的地就是食物，食物的功能就是维持人的健康。
唯有营养均衡的土地，才可能长出健康营养的食物。

过去100年以来，农业长期单靠3-5种元素栽种的食物无法种出最健康的食物，加上现代食物工厂大量的加工，天然营养几乎消失殆尽。这也是现代人健康问题丛生、疾病年轻化、癌症、三高文明病通行世界的原因之一。

如果人类继续盲目的追求高产量的数字，而完全忽略了食物的营养内容，最后伤及自身的依然还是人类，因为：**不健康的土地 = 营养不良的食物 = 不健康的人类。**

善待土地，关心植物，我们还有机会改变一切。

The true meaning of agriculture

The ultimate goal of farming is to obtain food in order to maintain human health. Healthy and nutritious foods can be obtained from a healthy and fertile land only.

The dependence on only 3 to 5 types of elements in agriculture fail to produce healthy foods throughout the past 100 years. Furthermore, the processed food nowadays has nearly depleted all the food nutrients. These are the main reason why modern people nowadays are facing many health problems, diseases affected human at young age, cancer and many other sicknesses become so common worldwide.

Human being ourselves are the most affected if mankind continue to pursue blindly only on product yields quantities and totally ignore on their nutritional facts.

Unhealthy Land = Mal-nutritioun Food = Unhealthy Mankind

Cares on our land to save the plants. We have the opportunity to change everything.

KhaiEL

Share Innovation

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